

Stormwater Management BMPS (That Work!) for Quarry & Mining Operations

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Best Management Practices for Quarry & Mining Operations

SWPCP Schedule A-1 Narrative Requirements

1. Erosion Control
2. Minimize Exposure
3. Control Oil & Grease
4. Proper Disposal of Waste Chemicals & Materials
5. Debris Control
6. Practice Good Housekeeping
7. Spill Prevention & Response
8. Preventative Maintenance
9. Employee Education
10. Eliminate Non-Stormwater Discharge

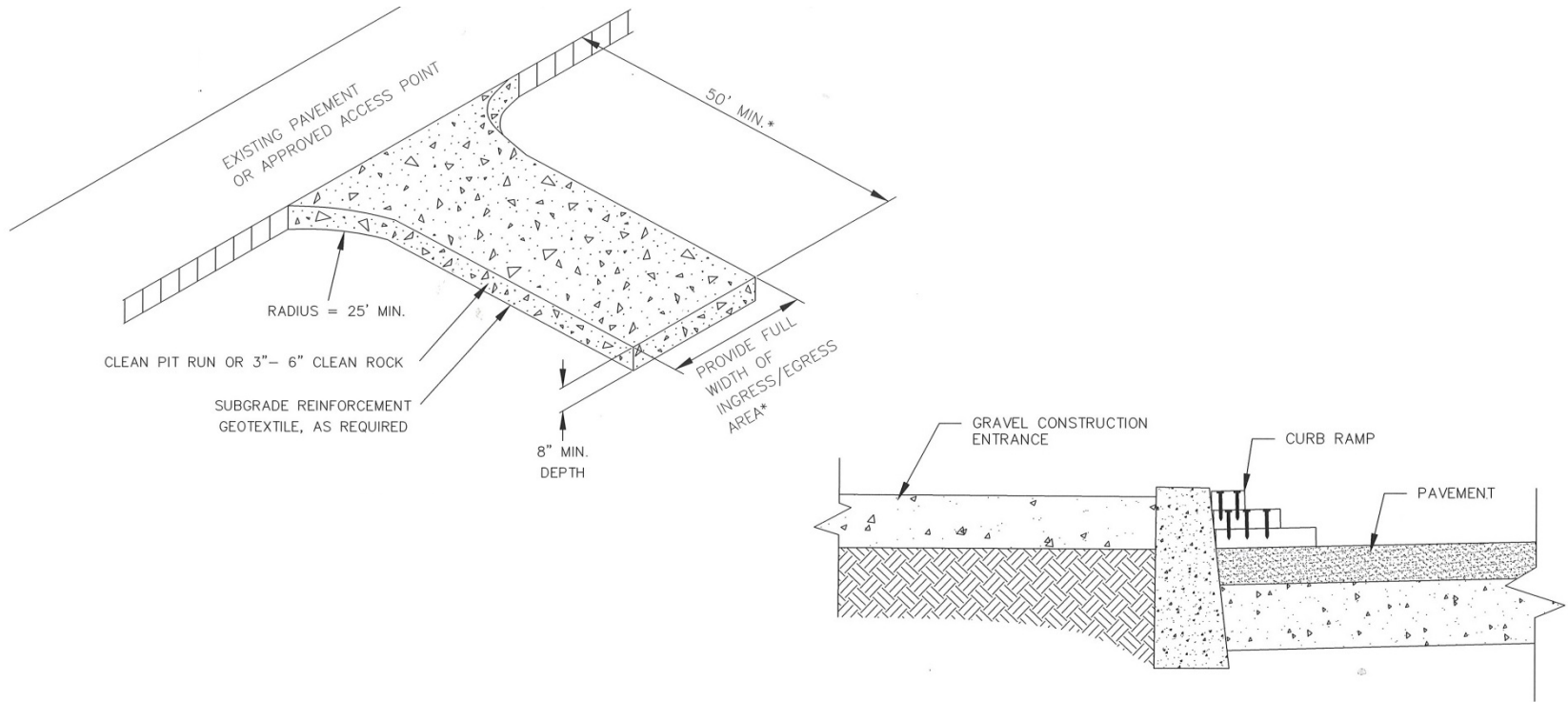
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1. Erosion Control (EC)

- Divert stormwater using slopes or berms.
- Use detention facilities, vegetated filter strips & check dams.
- Inspect annually & reseed / revegetate where feasible.
- Control track-out of materials by using gravel or paved roads. Limit traffic to mining areas & utilize a wheel wash for vehicles.
- Protect erodible overburden from mining areas.
- Remove silt from detention ponds at least annually.
- Use other EC measures if you are performing construction (silt fence, bio bags).

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EC BMP Example: Construction Entrance



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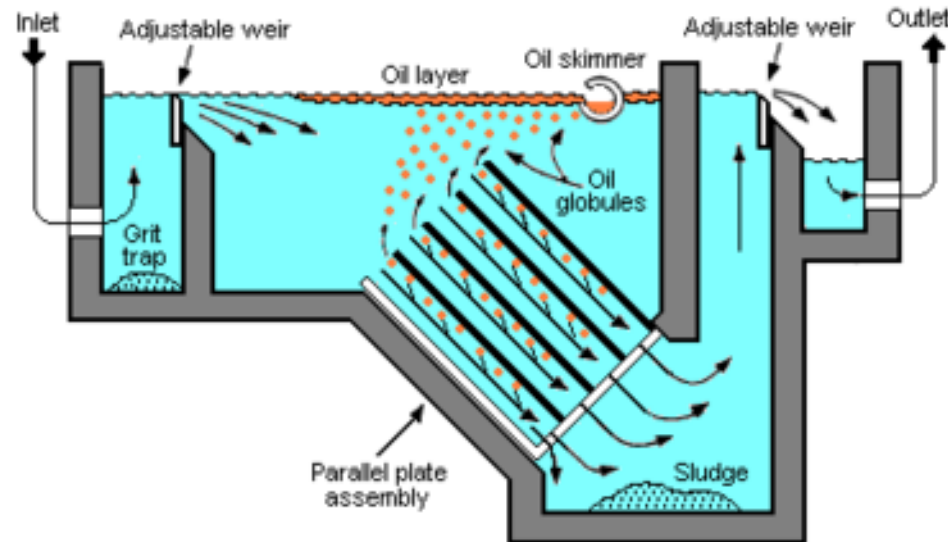
2. Minimize Exposure

- Cover manufacturing areas (roof/tarp) to prevent exposure to potential pollutants.
- Use berming & grading to prevent stormwater from entering fueling, manufacturing & disposal areas.
- Store hazardous materials within berms or containment areas.
- Perform clean up indoors, or under cover: do no spread outside.
- Use drip pans & absorbents. Clean up spills promptly.
- Store cement & asphalt in bermed areas.
- Minimize dust generation.

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3. Control Oil & Grease

- Use oil & grease separators, booms & skimmers to eliminate or minimize grease and oil contamination.



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4. Proper Disposal of Waste Chemicals & Materials

- Recycle or properly dispose of waste to minimize exposure.
- Cover waste materials using bins or dumpsters under a cover of roof or tarps.



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5. Debris Control

- Use screens, booms, & settling ponds to minimize waste.
- Prevent garbage & floatables from entering receiving waters.



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6. Practice Good Housekeeping

- Routinely clean exposed areas that may contribute to stormwater & mine dewatering.
- Make sweeping & litter pickup part of the daily routine.
- Keep materials orderly & labeled.
- Stow materials in the proper container type for the substance.
- Properly maintain vehicles according to a schedule.



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7. Spill Prevention & Response Procedures

- Minimize risks!
- Clearly label containers (solvents, used oil, pesticides).
- Provide barriers or secondary containment provisions.
- Develop procedures for cleaning up spills quickly. Have cleanup materials accessible & make sure personnel are trained properly.
- Have a communication plan in place for contacting appropriate emergency response personnel & agencies if necessary.



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8. Preventative Maintenance

- Regularly inspect, maintain & repair all industrial equipment & systems that might result in leaks & spills.
- Clean & maintain dewatering structures, catch basins, & treatment facilities which are part of the stormwater system.



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9. Employee Education

- Develop and maintain an employee orientation & education program. Personnel must know the components & goals of the SWPCP.



- Train employees who work in areas which may need stormwater control measures implemented.
- Train employees for both specific control measure (spill response) & monitoring, reporting and documentation.
- Training must occur within 30 days from hiring & annually thereafter.

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10. Eliminate Non-Stormwater Discharge

Eliminate any non-stormwater discharges not authorized by your permit by exclusion.

Exclusions include:

- Firefighting activities
 - Hydrant flushing
 - Potable water
 - Uncontaminated condensate
 - Irrigation drainage
 - Landscape watering
 - Pavement wash water (no detergents or hot water)
 - Foundation drains
 - Incidental windblown mist from cooling towers
- (See Condition 6 for specific details)*

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Thank you for the opportunity to be here today!

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